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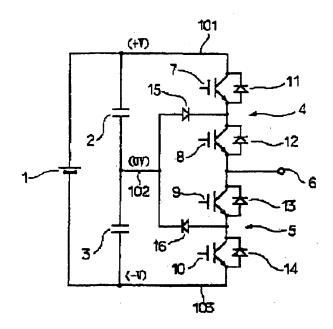
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TITLE

MULTILEVEL SWITCHING TYPE

POWER CONVERTER



ABSTRACT :

PROBLEM TO BE SOLVED: To surely reduce a loss of a multi-level switching-type power converter with a simplified structure.

SOLUTION: Series-connected first to fourth self-extinguishing type switching elements (IGBT 7-10) are connected in parallel to a DC power supply 1, and a pulse potential which changes between positive potential +V and neutral point potential 0V can be output from an output terminal 6 through repetition of the on state of IGBT 7, 8 and on stage of IGBT 8, 9. Moreover, a pulse potential which changes between negative potential -V and neutral point potential OV can also be output from the output terminal 6, through repetition of the on state of IGBT 9, 10 and on state of IGBT 8, 9. In this case, since the characteristic is set so that the one voltage of IGBT 8, 9 having less number of times of the switching operation is lower than that of IGBT 7, 10, loss of arms 4, 5 can be reduced by reducing normal loss of IGBT 8, 9.

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